AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-2 (Canceled).

Claim 3 (Original): A refrigeration cycle apparatus in which a refrigeration cycle uses carbon dioxide as refrigerant and has a compressor, an outdoor heat exchanger, an expander and an indoor heat exchanger, and the refrigeration cycle including a bypass circuit provided in parallel to said expander, and a control valve which adjusts a flow rate of refrigerant flowing through said bypass circuit, said compressor being driven by power recover by said expander, wherein said refrigeration cycle apparatus comprises an internal heat exchanger which exchanges heat of high pressure refrigerant flowing through said bypass circuit and heat of low pressure refrigerant before the low pressure refrigerant is suctioned by said compressor.

Claim 4 (Original): A refrigeration cycle apparatus in which a refrigeration cycle uses carbon dioxide as refrigerant and has a compressor, an outdoor heat exchanger, an expander, an indoor heat exchanger and an auxiliary compressor, and the refrigeration cycle including a bypass circuit provided in parallel to said expander, and a control valve which adjusts a flow rate of

refrigerant flowing through said bypass circuit, said auxiliary compressor being driven by power recover by said expander, wherein said refrigeration cycle apparatus comprises an internal heat exchanger which exchanges heat of high pressure refrigerant flowing through said bypass circuit and heat of low pressure refrigerant before the low pressure refrigerant is suctioned by said compressor.

Claim 5 (Original): A determining method of a high pressure of a refrigeration cycle apparatus, said refrigeration cycle apparatus being described in claim 3 or 4, wherein if an optimal high pressure of a first refrigeration cycle flowing through said expander and a second refrigeration cycle flowing through said bypass circuit is defined as Ph, and a bypass amount ratio flowing through said bypass circuit in said Ph is defined as Rb0, and a maximum refrigeration cycle efficiency of said first refrigeration cycle in said Ph is defined as COPe, and a maximum refrigeration cycle efficiency of said second refrigeration cycle in said Ph is defined as COPb, the optimal high pressure Ph which maximizes $(1-Rb0) \times COPe + Rb0 \times COPb$ is determined.

Claim 6 (Original): A control method of a refrigeration cycle apparatus wherein said control valve is controlled such that a high pressure determined by the determining method of the high pressure of the refrigeration cycle apparatus according to claim 5 is obtained.